

EXPRESS MAIL NO: EL750740777US

Docket No. 99-039-TAP

**CLAIMS:**

What is claimed is:

- 1 1. A method in a secure gateway for sharing a multiple  
2 gateway automated data storage system containing a first  
3 data storage unit with data stored within the first data  
4 storage unit, comprising the steps of:  
5 transmitting the data from the first data storage  
6 unit within a first automated data storage system to a  
7 second data storage unit;  
8 receiving a request from a second data storage  
9 system for the second data storage unit; and  
10 transporting the second data storage unit to the  
11 second data storage system.
- 1 2. The method of claim 1, further comprising:  
2 generating a identification qualifier for the second  
3 data storage unit.
- 1 3. The method of claim 1, wherein the first automated  
2 data storage system is a source automated data storage  
3 system.
- 1 4. The method of claim 3, wherein the source data  
2 storage system is an unclassified data storage system.

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1 5. The method of claim 1, wherein the second data  
2 storage system is a destination automated data storage  
3 system.

1 6. The method of claim 5, wherein the destination data  
2 storage system is a classified destination data storage  
3 system.

1 7. The method of claim 1, further comprising:  
2 updating a control data set managed by an automated  
3 library data storage system library server.

1 8. The method of claim 7, wherein the control data set  
2 is integrated into the automated data storage system  
3 library server.

1 9. The method of claim 7, wherein the control data set  
2 is external to the automated data storage system library  
3 server.

1 10. The method of claim 7, wherein updating the control  
2 data set comprises:  
3 decataloging the second data storage unit from the  
4 first automated data storage system; and  
5 notifying the automated library data storage system  
6 library server that the second data storage unit has been  
7 removed from the first automated data storage system.

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1 11. The method of claim 7, wherein updating the control  
2 data set comprises:  
3 cataloging the second data storage unit into the  
4 second automated data storage system; and  
5 notifying the automated library data storage system  
6 library server that the second data storage unit has been  
7 received at the second automated data storage system.

1 12. The method of claim 1, wherein transporting the  
2 second data storage unit to the second data storage  
3 system further comprises:  
4 controlling movement of a robot within an automated  
5 library data storage system library server.

1 13. The method of claim 1, wherein the multiple gateway  
2 automated data storage system comprises at least two  
3 automated data storage systems.

1 14. A system in a secure gateway for sharing a multiple  
2 gateway automated data storage system containing a first  
3 data storage unit with data stored within the first data  
4 storage unit, comprising:  
5 transmitting means for transmitting the data from  
6 the first data storage unit within a first automated data  
7 storage system to a second data storage unit;  
8 receiving means for receiving a request from a  
9 second data storage system for the second data storage  
10 unit; and

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11        transporting means for transporting the second data  
12 storage unit to the second data storage system.

1    15.    The system of claim 14, further comprising:  
2        generating means for generating a identification  
3    qualifier for the second data storage unit.

1    16.    The system of claim 14, wherein the first automated  
2    data storage system is a source automated data storage  
3    system.

1    17.    The system of claim 16, wherein the source data  
2    storage system is an unclassified data storage system.

1    18.    The system of claim 14, wherein the second data  
2    storage system is a destination automated data storage  
3    system.

1    19.    The system of claim 18, wherein the destination data  
2    storage system is a classified destination data storage  
3    system.

1    20.    The system of claim 14, further comprising:  
2        updating means for updating a control data set  
3    managed by an automated library data storage system  
4    library server.

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1 21. The system of claim 20, wherein the control data set  
2 is integrated into the automated data storage system  
3 library server.

1 22. The system of claim 20, wherein the control data set  
2 is external to the automated data storage system library  
3 server.

1 23. The system of claim 14, wherein the updating means  
2 for updating the control data set comprises:

3       decataloging means for decataloging the second data  
4 storage unit from the first automated data storage  
5 system; and

6       notifying means for notifying the automated library  
7 data storage system library server that the second data  
8 storage unit has been removed from the first automated  
9 data storage system.

1 24. The system of claim 14, wherein the updating means  
2 for updating the control data set comprises:

3       cataloging means for cataloging the second data  
4 storage unit into the second automated data storage  
5 system; and

6       notifying means for notifying the automated library  
7 data storage system library server that the second data  
8 storage unit has been received at the second automated  
9 data storage system.

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1 25. The system of claim 14, wherein the transporting  
2 means for transporting the second data storage unit to  
3 the second data storage system further comprises:

4 controlling means for controlling movement of a  
5 robot within an automated library data storage system  
6 library server.

1 26. The system of claim 14, wherein the multiple gateway  
2 automated data storage system comprises at least two  
3 automated data storage systems.

1 27. A computer program product in a computer readable  
2 medium for sharing a multiple gateway automated data  
3 storage system containing a first data storage unit with  
4 data stored within the first data storage unit,  
5 comprising:

6 first instructions for transmitting the data from  
7 the first data storage unit within a first automated data  
8 storage system to a second data storage unit;

9 second instructions for receiving a request from a  
10 second data storage system for the second data storage  
11 unit; and

12 third instructions for transporting the second data  
13 storage unit to the second data storage system.

1 28. The computer program product of claim 27, further  
2 comprising:

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3 fourth instructions for generating a identification  
4 qualifier for the second data storage unit.

1 29. The computer program product of claim 27, further  
2 comprising:

3 fifth instructions for updating a control data set  
4 managed by an automated library data storage system  
5 library server.

1 30. A secure gateway apparatus for sharing a multiple  
2 gateway automated data storage system, the apparatus  
3 comprising:

4 a controller that controls transporting a data  
5 storage unit from a first data storage device to a second  
6 data storage device; and

7 a transportation device that transports the data  
8 storage unit from the first data storage device to the  
9 second data storage device, wherein the transportation  
10 device protects against transporting the data storage  
11 unit from the second data storage device back to the  
12 first data storage device.